

(70)

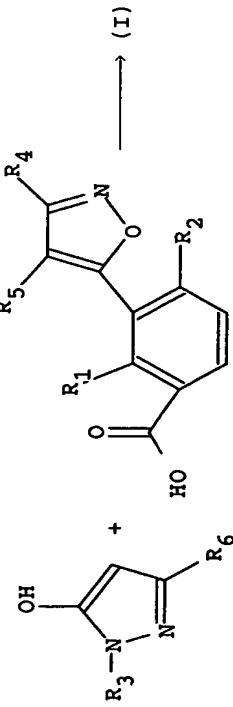
<p><b>98-041692/04</b></p> <p>NIPPON SODA CO</p> <p>96.04.26 96JP-131170 (97.11.06) C02 C07D 413/10, A01N 43/56</p> <p>New 1-isoxazol-5-yl, 3-pyrazol-4-yl benzene derivatives are herbicides useful for crop plants e.g. corn or wheat (Jpn)</p> <p>C98-013844 N(AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE HU IL IS JP KE KG KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SU SK TJ TM TR TT UA UG US UZ VN) R(AT BE CH DE DK EA ES FI FR GB GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG)</p> <p>Addnl. Data: ADACHI H, YAMAGUCHI M, MIYAHARA O, KOGUCHI M, TOMITA K, TAKAHASHI A, KAWANA T</p> <p>97.02.10 97WO-JP0342</p>	<p><b>NIPS 96-04.26</b></p> <p>*WO 9741117-A1</p> <p>C(7-E1, 14-V2B) .2</p>	<p style="text-align: center;">   <math display="block">  \begin{array}{c}  \text{R}_5 \\    \\  \text{R}_1 \\    \\  \text{O} \\    \\  \text{R}_3 - \text{N} = \text{C} = \text{N} - \text{R}_6 \\    \\  \text{R}_2  \end{array}  \quad (\text{I})  </math> </p>
		<p>1-Isoxazol-5-yl, 3-pyrazol-4-yl benzene derivatives of formula (I) and their salts are new:</p> <p style="text-align: center;"> <math>\text{R}_1 = \text{halo};</math>  <math>\text{R}_2 = \text{halo or 1-6C alkylsulphonyl};</math>  <math>\text{R}_3 = \text{H or 1-6C alkyl};</math>  <math>\text{R}_4, \text{R}_6 = \text{H or 1-6C alkyl}.</math> </p> <p><u>USE</u></p> <p>(I) are selective herbicides useful in crop plants such as wheat and</p> <p style="text-align: right;">[WO 9741117-A+]</p>

com.

SPECIFIC COMPOUNDS

7 Compounds (I) are specifically claimed e.g.  
4-[2-chloro-3-(3-methyl-1,2-isoxazol-5-yl)-4-  
methylsulphonyl]benzoyl-1-ethyl-5-hydroxy pyrazole;  
4-[2,4-dichloro-3-(3-methyl-1,2-isoxazol-5-yl)]benzoyl-1-ethyl-5-  
hydroxy pyrazole; and  
4-[2,4-dichloro-3-(3-methyl-1,2-isoxazol-5-yl)]benzoyl-1,3-dimethyl-5-  
hydroxy pyrazole.

PREPARATION



EXAMPLE

2-Chloro-4-methanesulphonyl-3-(3-methyl-1,2-isoxazol-5-yl)benzoyl chloride (1.58 g) in  $\text{CH}_2\text{Cl}_2$  (5 ml) was added dropwise to 1-ethyl-5-hydroxypyrazole HCl (0.7 g) and  $\text{NEt}_3$  (0.95 g) in  $\text{CH}_2\text{Cl}_2$  (20 ml) and the mixture was stirred for 1 hour at room temperature. Work-up including silica gel chromatography gave 0.73 g 4-[2-chloro-3-(3-methyl-1,2-isoxazol-5-yl)-4-methylsulphonyl benzoyl]-1-ethyl-5-hydroxypyrazole, m.pt. 230-233 °C.

HERBICIDAL DATA

(I;  $\text{R}_3 = \text{R}_4 = \text{Me}$ ;  $\text{R}_1 = \text{Cl}$ ,  $\text{R}_2 = \text{SO}_2\text{Me}$  and  $\text{R}_5 = \text{H}$ ) at 63 g/ha gave 100% control of *Echinochloa crus galli* and *Xanthium strumarium*, with no phytotoxicity towards wheat. (SCG (51pp1839DwgNo.0/0))  
SR-AU9336481 AU9646655 AU9988130 EP282944 EP629623 JP2173  
JP5515530 US4885022 US5468722 WO9318031 WO9626206

WO 9741117-A